

Claims

1 1. A device for monitoring and recording a user's activity for
2 health or fitness purposes, comprising:

3 a housing adapted to be supported on a user's body;

4 a clock for generating electrical signals representative of time supported
5 in the housing;

6 a motion sensor operative to generate electrical signals as a function of
7 the user's motion, supported in the housing;

8 a first entry means adapted to generate an electrical signal on actuation
9 by a user supported on the housing;

10 an electronic memory adapted to record said signals representative of
11 the user's motion and the time of occurrence of signals representative of the
12 user's motion and actuation of the first entry means supported on the housing;
13 and

14 means for transferring the signals recorded in said memory to an
15 external user display.

1 2. The device of claim 1 in which the motion sensor comprises an
2 accelerometer.

1 3. The device of claim 1 further including a display of the current
2 time.

1 4. The device of claim 1 further including sensors adapted to
2 interact with a user's body to sense a physiological parameter.

1 5. The device of claim 4 wherein the physiological parameter
2 comprises pulse rate.

1 6. The device of claim 4 wherein the physiological parameter
2 comprises body temperature.

1 7. The device of claim 1 further including a ¹¹²second entry means
2 adapted to generate an electrical signal on actuation by a user, whereby one of
3 said entry means may record the time of consumption of food and a second of
4 said entry means may record the time of occurrence of exercise activities.

1 8. The device of claim 1, further including a strap attached to the
2 housing for securing the housing to the user's wrist.

1 9. The device of claim 1, further including means for securing the
2 housing to clothing worn by the user.

1 10. The device of claim 1, further including a display device,
2 adapted to receive signals from the memory to generate a graphic display

3 containing indicia setting forth the occurrence of activity events over a period
4 of time.

1 11. The device of claim 10 wherein the graphic display device
2 constitutes a personal digital assistant.

1 12. The device of claim 1 further including means for
2 communicating signals stored in said memory to a remote computer over the
3 Internet. *R*

1 13. The device of claim 1 further including a barcode reader
2 supported on the housing and electronics adapted to store signals generated by
3 the barcode reader in said memory.

1 14. The device of claim 1 further including photosensitive means
2 for capturing images and storing them in said memory.

1 15. A personal activity monitor, comprising:
2 a housing;
3 means for securing the housing to the body of a user;
4 a clock supported in the housing;
5 a graphical display supported on the housing;

6 a motion sensor supported in the housing and operative to generate
7 electrical signals as a function of the motion of the housing;

8 a plurality of user entry keys, manually actuatable by the user, supported
9 on the housing, each key being adapted to generate an electrical signal upon
10 actuation by a user;

11 an electronic memory adapted to record signals representative of a
12 user's motion and the time of occurrence of signals representative of the user's
13 motion and of manual actuation of each of the entry keys, supported on the
14 housing; and

15 means for transferring the signals recorded in said memory to an
16 external utilization device. *u*

1 16. The personal activity monitor of claim 15 wherein each of the
2 plurality of user entry keys is associated with a separate activity of the user.

1 17. The personal activity monitor of claim 16 wherein at least one
2 of the user entry keys is associated with consumption of foods and another of
3 said user entry keys is associated with exercise activities.

1 18. The personal activity monitor of claim 15 further including strap
2 means for securing the housing to the wrist of a user; and wherein said display
3 supported on the housing displays the current time and information relating to
4 the signals stored in the memory.

1 19. A personal activity monitor comprising:
2 a housing;
3 straps associated with the housing for securing the housing to the wrist
4 of a user;
5 a clock supported in the housing;
6 a motion sensor operative to generate electrical signals as a function of
7 the motion of the housing, supported in the housing;
8 a plurality of entry keys on the housing manually actuable by the user
9 to generate electrical signals;
10 an electronic memory adapted to record signals representative of the
11 motion of the housing, their time of occurrence, and actuation of each of said
12 entry keys by the operator, supported on the housing;
13 a graphical display supported on the housing and adapted to display the
14 current time and signals stored in the memory;
15 a pulse rate sensor supported on the housing and adapted to measure the
16 instantaneous pulse rate of the user and generate electrical signals for provision
17 to said memory; and
18 means for transferring the signals recorded in said memory to an
19 external utilization device.

1 20. The personal activity monitor of claim 19 further including a
2 camera supported on the housing and adapted to capture digital images upon

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3 actuation by the user and means for recording said digital images in the
4 memory along with the time of their capture.

1 21. The personal activity monitor of claim 19 further including an
2 audio recorder and microphone supported on the housing for use by the user in
3 recording information relating to activities and recording the same in the
4 memory for later reproduction.

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